

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Kohl et al.

Serial No.: 045,799 (Continuation of SN 748,591)

Filed: April 28, 1987

For: DIALKOXYPYRIDINES, PROCESSES FOR THEIR PREPARATION, THEIR
USE AND MEDICAMENTS CONTAINING THEM

Group Art Unit: 121

Examiner: Jane T. Fan

Handwritten initials: X/JS

Honorable Commissioner of Patents
and Trademarks
Washington, D.C. 20231

February 05, 1988

Sir:

DECLARATION UNDER RULE 132

I, UWE KRÜGER, declare and say:

THAT, I am the declarant of a Declaration under Rule 132 executed on April 24, 1987, and filed together with the above application on April 28, 1987, and of a Declaration under Rule 132 executed on December 04, 1987.

THAT, in order to additionally substantiate the statements made in these Declarations, two further pairs of compounds have been synthesized and investigated with regard to their stability characteristics.

Comparative Tests

Compounds

The following compounds of U.S. patent application SN 045,799 (A) and U.S. patent no. 4,555,518 (D) listed in Table 1 have been investigated in the comparative tests:

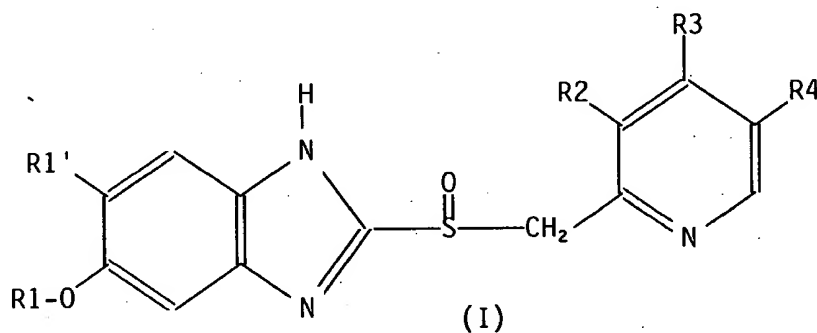
Table 1

| Compound No. | Origin | Name |
|--------------|--------|--|
| 31 | D | 5-Difluoromethoxy-6-fluoro-2-[(4-methoxy-3-methyl-2-pyridyl)methylsulfinyl]-1H-benzimidazole |
| 32 | A | 5-Difluoromethoxy-6-fluoro-2-[(3,4-dimethoxy-2-pyridyl)methylsulfinyl]-1H-benzimidazole |
| 33 | D | 5-Chlorodifluoromethoxy-2-[(4-methoxy-3-methyl-2-pyridyl)-methylsulfinyl]-1H-benzimidazole |
| 34 | A | 5-Chlorodifluoromethoxy-2-[(3,4-dimethoxy-2-pyridyl)methylsulfinyl]-1H-benzimidazole |

Results

The stability data which resulted when the compounds of Table 1 were investigated according to the method described in the Declaration executed on December 04, 1987, in detail, are listed in the following Table 2. The substituents of the investigated compounds were included in the table. Prior art compounds were marked with an asterisk. The value given in the last column is the half-life in hours, i.e. the time in which half of the compound decomposes in solution at a pH of 5.

Table 2

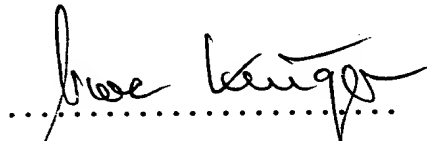


| Compound No. | R1-O | R1' | R2 | R3 | R4 | t 1/2(h) |
|--------------|---------------------|-----|-------------------|-------------------|----|----------|
| 31* | CHF ₂ O | F | CH ₃ | CH ₃ O | H | 0.5 |
| 32 | CHF ₂ O | F | CH ₃ O | CH ₃ O | H | 8.4 |
| 33* | CF ₂ ClO | H | CH ₃ | CH ₃ O | H | 0.4 |
| 34 | CF ₂ ClO | H | CH ₃ O | CH ₃ O | H | 4.4 |

The data in the above Table 2 are an additional proof for the validity of the general conclusion that - irrespective of the substituent(s) in the benzimidazole part of the molecule - in each pair of compounds **always** those compounds have a significant higher stability, which have two alkoxy groups in the pyridine part of the molecule instead of one.

The undersigned Declarant declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signed at Constance, Federal Republic of Germany,
this 5th day of February, 1988.


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Dr. Uwe Krüger